# Interaction Techniques for Distance Learning

DEFINITION OF DISTANCE LEARNING.

Distance learning is unique in its accommodative marriage of instructional approach with a technological delivery system. It stands alone as an educational form.

How is the distance learning classroom different?
- Physical distance between the students and the instructor.
- Difference in classroom dimensions.
- Physically, socially, and psychologically "tethered" to the distance site by technology.
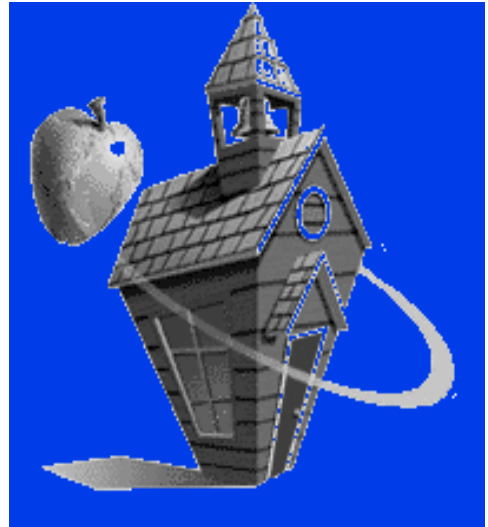
The distance learning classroom is not the same as a traditional classroom. Distance teaching requires instructors to be resourceful, enthusiastic, and not afraid to step out of their "comfort zone" to try something new. Unfortunately, the technology of the last two decades has changed schools far less that it has the worlds of work, entertainment and communication. On the whole teachers have simply closed their classroom doors and gone right on teaching with the same old style of teaching just as they were taught.

Good instructional design for distance learning allows for a high degree of student interaction, maximizing the unique multimedia capabilities of the EDNET classroom. The design process begins with an awareness of those capabilities.

Thirteen Ways to Encourage Interaction for Distance Learning Teachers

1. Group Discussion Activities
    A. Maintain control with diplomacy.
    B. Arrange grouping with different ability levels in each group.
    C. Encourage more group discussions by training longer.

2. Dealing with Challenging Students
    A. The "Talk Hog."
        1. Move toward him or her.
        2. Say "Please see me (or talk to me) after class."
        3. Point your finger in the air (you're signalling that you're ready to speak).
        4. You're the "traffic cop." "Let's keep moving along!"
    B. The "Heckler."
        1. The first one is free.
        2. Positive response–lighten the mood, friendly.
        3. Negative response–sarcasm.
        4. During a break–"How's it going?"
    C. The "Resentful Student."
        1. Include him or her in common ground issues.
        2. Use "I feel," "I've felt that way," or "I've found that..."

D. The "Subject Matter Specialist."
    1. Use him or her.
    2. Don't let him or her intimidate you.
    3. Maintain strong eye contact.
E. The "Griper."
    1. Acknowledgment—"I understand it is difficult..."
    2. Aikido:
        a. Japanese word.
        b. "Do not resist the force–blend with it."
    3. "From your perspective...I can understand."
    4. Ask "Does anybody else feel this strongly?"
F. The "Quiet Type."
    1. Ask questions and involve.
    2. Maintain pleasant eye contact.
    3. Don't force involvement.
    4. Small group activities are best.

3. The Case Study Approach to Interactivity
A. Vary your approach.
B. Find an appropriate movie, training film, video, or TV clip.
C. Create an audiotape of a conversation or description.
D. Bring in a guest speaker.
E. Find an article or editorial and share it with the group.
F. Ask for a participant case from the class.

4. The Lecture Approach to Interactivity
A. Add spice to your lecture (props, graphics, ELMO, video, etc.).
B. Have groups of students listen for different types of content.
   (specialize their listening and share their notes).
C. Arrange a "relevance checkup" where you stop periodically and
   have a student describe an experience or on-the-job relevance
    and benefit of your current topic.

5. The Structured Note-taking Approach to Interactivity
A. Add quick, creative structure.
B. Three columns–see example.

New Information	Important Reminders	Hot Ideas

C. Create a simple model or shape in which your main points can
   be placed.

      D. Guide students to create notes consistent with the model you use.

      E. Prepare "fill-in-the-blanks" worksheets ahead of time to coincide with your lecture, video, discussion, etc.

6. The Panel Discussion/Outside Expert Approach to Interactivity

      A. Delegate training to the experts.

      B. Allow each panelist to speak.

      C. Rehearse this activity before going "on the air."

      D. Invite a college professor or other business or industry professional to deliver a module for which he or she has expertise.

7. Skill Practice/Exercises for Interaction

      A. Create quick skill applications.

      B. Pinpoint the specific skill.

      C. Brainstorm contexts in which it could be practiced.

          1. Critique written examples.

          2. Rank, rate, check written examples.

          3. Think of a unique, unrelated environment in which similar skills are practiced.

      D. Create a clear description of how the skill will be practiced.

8. Role Play Activities for Interaction:

      A. Vary the traditional role play.

      B. Use a "pause button" where at any time you have permission to stop the role play for discussion.

      C. Any member can take time out to consult with his/her "conversational colleague" (another student who advises but does not directly participate in the role play).

9. Games to Enhance Interactivity

      A. Use short, fun activities (geared to age and experience of class).

      B. Create a variation of a board game. Visit a toy store and read the backs of game boxes.

      C. Base a game on a popular TV game show or childhood game.

      D. Create games based on simple competition (e.g., the fastest to demonstrate a skill, generate the greatest number of ideas).

10. Interactive Demonstration Activities for the Distance Learning Teacher

      A. Add a twist to a demonstration.

      B. Use a "broken" demonstration where you or the participants have permission to "pause," "rewind," and "replay" multiple times.

      C. Have students assist you with the demonstration or even perform the demonstration.

    D. Be careful and cautious in doing physics or chemistry demonstrations. Practice and rehearse for the best camera shots.

    E. Play "Follow the Leader" with a broken demonstration, having the students imitate each part.

    F. Have participants instruct you through an entire process, giving you tips for better performance as you go.

11. Question-and-Answer or Technique for Using a "Parking Lot"
    A. Tape a flip chart paper on the wall or ELMO.
    B. Write "The Parking Lot" at the top of the paper.
    C. Place a stack of sticky notes on a student desks.
    D. When a student has a question, it is "parked" at the "Parking Lot."
    E. Teacher and/or facilitator will read the notes at a convenient time in class.
    F. Teacher and/or facilitator will read the notes at a convenient time in class.
    G. Useful for grading purposes (participation points).

12. Feedback to Encourage More Interactivity
    A. LB/NT (follow a "Liked Best/Next Time" sequence).
    B. After a session of skill practice or other performance technique, use the following four-step process to generate future-focused feedback in a nonthreatening way:
        1. The student describes what he/she liked best about his/her performance.
        2. The instructor describes what he/she liked best about the performance.
        3. The student describes what he/she would do differently the next time he/she performs the skill(s).
        4. The instructor gives specific suggestions for what the student might do the next time he/she performs the skill(s).

13. Structured Questioning to Start Interactivity
    A. Plan 6 to 12 questions. Use as a follow-up activity.
    B. Questions should be of the higher level" (see page 43, Bloom's Taxonomy of Educational Objectives).
    C. Prepare a note card of each student's name with the school's name.
    D. Randomly choose a card and read the question.
        1. Use school's name first and give the facilitator time to

switch up the AMX pad to NORMAL or REMOTE so that
everyone can see the remote site or student in the class
(see EDNET Users Manual, Sections 6-6 to 6-10).

2. After the school is "switched up," finish or ask the question
again and direct it to a student.
3. Be a "showman" while doing this. Make a big deal of it!

E. Caution!
1. Do NOT ask open-ended questions if you don't identify who
should answer it (see item 2 below).
2. Avoid rhetorical questions such as: "Are there any questions out there?"
or "What is the answer to question #xx?"
3. Be sure to direct ALL questions to students and schools.

Interactional Strategies and Tips in the EDNET Classroom

1. Talk with your students, not to them. When they speak, listen. People
can tell if you are engaged.

2. When you ask a question, allow enough "wait time" for an answer.
You may need to direct your question to a particular site so that at
least some school has ownership of the expected answer; otherwise,
no one will answer. Teachers should direct the question to a particular
student or corner of the room. "Wait time" is also important for the
facilitator to switch up the site so that everyone can see who is
answering the question.

3. Avoid heated debate on the system. Try the "see me after class" method.

4. Involve the students as much as possible when answering questions
that come up during the discussion. Hold your answers and stories
as a backup.

5. Make a mental note of important points. Look for opportunities to relate to
those points as the discussion progresses. Credit the students for
their insight.

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6. Come with a "ready ear." Nothing keeps a discussion moving better than when people sense your genuine interest in what they are saying.

7. Summarize following question-and-answer periods.

8. Address students by name throughout discussions.

9. Ensure all students have heard question or discussion points.

10. Maintain frequent eye contact with the camera. Sending a close-up shot of the instructor serves as a link to distant sites.

11. Students in distant classrooms must be recognized as real people.

12. Direct your own questions to individuals at each site.

13. Endure periods of silence while waiting for answers to questions, especially from distant sites.

14. Send a positive, personable image. Let students know you are interested by your tone and enthusiasm.

15. Redirect student questions to individuals from distant sites.

16. When asking a rhetorical question (such as: "Are there any questions or comments out there?"), address it to specific sites, one at a time.

17. Be aware–comments intended to be funny or lively can be interpreted as sarcastic or even demeaning without the face-to-face interaction with the students.

18. Seating charts are a good idea to help you get to know your students at all sites.

19. Determine if class participation will be part of the class grade. Most EDNET teachers rely heavily on this method to ensure lively interaction.

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20. Determine how you want to have students to contact you:
    - Teacher hours
    - Phone, fax, email, mail, etc.

21. Provide some sort of orientation to distance learning on the first day of class. The Utah Education Network provides (free) EDNET student orientation materials to teachers and students.

22. Determine the role of the facilitator at your local and remote EDNET sites (see Appendix R).

23. Be sure to provide fast, accurate feedback to your students. Check for understanding by asking questions.

24. Be animated; use facial expressions.

25. Be involved, reacting to students.

26. Use voice inflections.

27. Have a sense of humor; be yourself.

28. Watch for accessories on your clothing that could be distracting.
    - Reflective glare on glasses.
    - Clothing with narrow stripes, checks, red, black, white.

29. Set the example of professionalism.

30. Design class exercises that require some self-disclosure (more engaged if real sharing takes place).

31. Stay alert to student skill levels and deficiencies or written assignment or oral presentations.
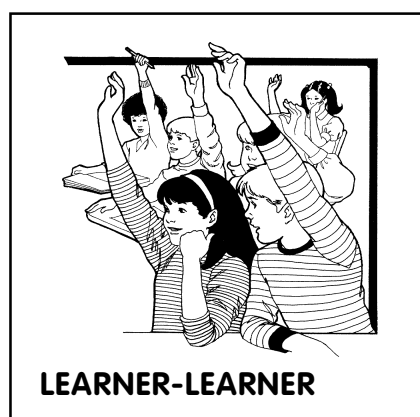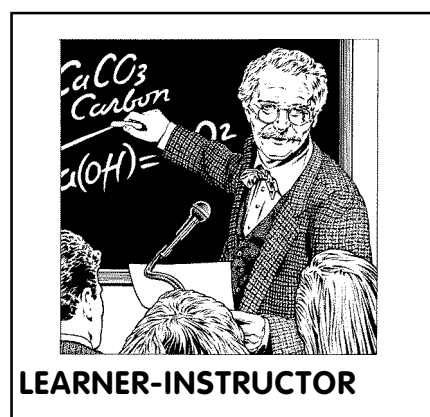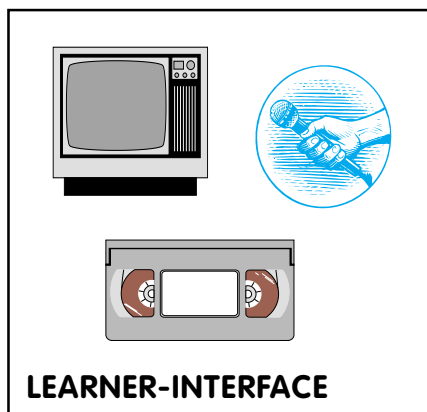
32. If possible, teach from or at least visit you other sites as soon as possible.

The Learner Interaction Model

1. Four major forms of interaction in the distance learning classrooom
    A. Learner-Interface
    B. Learner-Content
    C. Learner-Instructor
    D. Learner-Learner

LEARNER-INTERFACE

LEARNER-CONTENT

LEARNER-INSTRUCTOR

LEARNER-LEARNER

2. The Learner-Interface Interaction
    A. Provides access to instruction.
    B. Permits learners to participate in essential learner interactions.
    C.   Is technological in that it relies on telecommunication hardware.
    D. Is strategic in that it is designed and delivered with meaningful, task-related activities using the telecommunication hardware.
    E.   Should quickly become:
        1. User friendly.
        2. Unobtrusive in the classroom, cannot "get in the way!"
        3. Transparent to teacher and students.

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    F.   Interaction for good distance learning requires:
        1. Careful planning.
        2. Thoughtful design.
    G.   Teachers are required to become literate in technology.
        1. Technology orientation (four-hour workshop).
        2. Hands-on practice on actual equipment.
        3. Faculty orientation and training (16-hour workshop).
    H.   Distance learning requires students' focused attention for long periods. This can be done by:
        1. Ensuring students' capacity for attention.
        2. Orienting students to distance learning procedures.
        3. Having a congenial but disciplined classroom.
        4. Having reliable access by the student to the teacher and content.

3. The Learner-Content Interaction
    A.   Students' dialog with self.
    B.   Challenges prior knowledge and understanding to make sense of new information.
    C.   Making the task of holding students' attention becomes quite formidable when they have to "watch the box" or "look through the window" for one or more hours.
    D.   Those images that occupy the screen to capture attention and engage the viewer's mental processes become critical to learning and must be deliberately planned and designed.
    E.   Content presentation possibilities.
        1. Convert text to familiar graphic representations or pictures.
        2. Create visual analogies.
        3. Use props, icons, and color in graphic slides.
        4. Change camera positions (shots) to simulate motion or interaction.
        5. Utilize complementing visual information with music or sound effects.
        6. Use a variety of visual media.
            a. Videotapes, CD-ROMs, slides, animations.
            b. Graphic stills, photographs, a textbook under the ELMO.
    F.   EnterTRAINment–advantageous only if it legitimately supports the instructional need to hold our students' attention for substantial periods.

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4. The Learner-Instructor Interaction
    A. Physical distance in distance learning hinders the relationship between instructor and students.
    B. Mutual involvement remains vital to sound instructional process.
    C. Instructor's role is to:
        1. Stimulate, motivate, and maintain interest in content.
        2. Provide counsel, support, and encouragement to students.
        3. Make presentation, conduct daily class.
        4. Organize the application of what is being learned.
        5. Simulate eye contact with students through vigilant eye-to-camera contact. "Teach to the camera."
        6. Acknowledge sites and students by their names.
    D. The "human touch" to distance learning can be provided by:
        1. Using natural speech and emotions and projecting personality.
        2. Demonstrating a competency with the technology. Making the transition from one technology to another *seamless*.
        3. Using humor.
        4. Being appropriately dressed and looking professional.
        5. Being organized.
        6. Pacing the flow of activities and information presented.
        7. Orchestrating the learning process.
        8. Employing instructional strategies to facilitate learning.
        9. Using role-playing, simulation, case studies, games, laboratory discussions and demonstrations, and panel discussions.
        10. Incorporating practice with feedback to fine-tune and extend the learning process.
        11. Practicing.
    E. The distance learning classroom production requires the instructor to be involved simultaneously with both the students and the facilitators at the remote sites.

5. The Learner-Learner Interaction
    A. Creates a relationship between the local (onsite) students in your class and remote-site students.
    B. Requires us to have "faith in" the remote-site facilitator.
        1. It is important that facilitators have a clear vision of their role in the class.
        2. Your facilitators' involvement is critical to success in distance learning.
    C. Necessitates good classroom control at remote sites. It must be planned for.
    D. Has the remote-site facilitator becoming the "eyes, ears, and hands" of the teacher.
    E. Necessitates the remote-site facilitator giving directions and assisting with classroom behavior.
    F. Is instrumental in providing opportunities for enriched interaction.

6. Usually it is the instructional strategies, not the essential skills and knowledge, that need to change when converting a traditional classroom course to a distance learning course.

"Forced" Interaction in Telecommunicated Distance Learning

The responsibility for effective interaction in telecommunicated distance learning programs is the direct responsibility of the instructor (Winn, 1990). In most instances, the instructor must plan for and employ purposeful strategies to initiate and promote interaction. Otherwise, distance students are likely to gravitate to a passive role during the instructional process. Some techniques that will help ensure that high levels of teacher-student and student interaction occur in the distance learning exchange include (Oliver, 1994, pp 184-185):

• **Predetermine a block of time for interaction** and advise students in advance when interaction is anticipated. Provide an advance organizer to enable students to prepare for the interactive segment.

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- **Integrate on-air interaction with on-site activities** or assignments prepared in advance of interaction.

- **Designate specific students or sites to call in** with responses, comments, or questions. An unstructured invitation to call in will not ensure a response.

- **Motivate interaction with structured silence.** Avoid "filling in time" with potentially distracting activities while waiting for calls.

- **Vary the timing of the interactive segment** prior to, during, and following information presentation. Continued deferral of interaction until after the information presentation may reinforce passive viewing.

- **Encourage student-to-student interaction** and ensure opportunities for social affiliation. Ask an in-class student or a student from a different site to respond to the caller. Questions do not always have to be answered by the instructor.

Additional considerations for promoting high levels of interaction include (Baker, 1994; Barker & Goodwing, 1992; Ostendorf, 1989):

- **Initiate interaction within the first 20 minutes of a telecast.** If immediate interaction does not occur, distance students are likely to remain passive rather than active learners, regardless of later attempts at interaction. Quicker is better!

- **Prime participants for interaction.** Distance students should be reminded ahead of time that an interactive segment is forthcoming and that their opinions will be solicited.

- **Involve participants in discussion.** Assign questions to remote-site students prior to the telecast. This helps ensure that learners will come prepared for interaction. Furthermore, efforts should be made to involve all learners in class activities. Calling students by name to participate in class discussions will personalize lessons as well as notify students that they are each responsible to participate as active learners. Directed questions to a specific student(s) can be an effective approach in gaining more student participation. The instructor might also maintain a log, by student name, of who is participating and who is not. This can be used as a record to help remind the teacher to call on noncontributing members in the class or to more equitably distribute teacher-student interactions.

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- **Ask "low-order" and "high-order" questions.** Questions to learners should be preplanned and range from low order (recall or knowledge) to higher order (synthesis, analysis, problem solving). The teacher needs to ask a lot of questions to "force" interaction with the students. After posing a question, the teacher should allow sufficient "wait time" for students to process information before answering.

- **Clear teacher articulation.** The instructor must articulate clearly and distinctly. Verbal instructions from the teacher must be precise and explicit. Too much teacher-talk, especially if the teacher is rambling, can cause confusion. Also, a voice that portrays enthusiasm, variety in tone, and diversity in pace will do much to maintain student interest and cause students to want to be active participants in the learning process.

- **Use variety to involve students.** Watching the TV screen for a long period of time without interaction or involvement from students can be deadly. Brief teacher lectures (no more than 20 minutes) interspersed with questions work well. Other student involvement activities might include small-group work, dyad discussion, cooperative learning tasks, student presentations, discussions between students at two or more different sites, polling of students among all sites to seek their opinions, etc.

- **Appropriate use of humor.** Introducing humor to the class through examples and by poking fun at the technology, class events, or oneself adds a "spark" to the class, maintaining the interest and involvement of students. Participating in friendly banter with students prior to class, while taking roll, during break, or while `otherwise engaged over the telecommunications system also helps personalize social exchanges between instructor and students.

There cannot be too much emphasis placed on the importance of interaction in the distance learning classroom. It has been said many times that teachers can teach over these telecommunication systems with minor modifications to their lesson presentations and utilize the technology in the EDNET classroom. But, the real test of distance education is "can the students learn at a distance"?

Effective use of interaction in the classroom seems to be the key ingredient to make learning at a distance work well. Teachers have no less than 20 minutes to establish interaction each day in their class or it just will not happen at all, regardless of what the teacher tries to do after that. Our students are "professional television watchers." The distance learning teacher must quickly reach out and engage the remote students in his/her lesson activities. Those teachers who have been successful at distance education and students who enjoy distance learning will tell you that it is the interaction capability of the system coupled with a trained, creative, and enthused teacher that makes the distance learning classes come alive, even though the teacher isn't there in the classroom.

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